



INDUSTRY PROFILES

**Mining and Oil and Gas
Extraction Industry**

2014

Alberta

Overview:

The Mining and Oil and Gas Extraction industry¹ in Alberta includes companies involved in activities engaged in extracting naturally occurring minerals, such as:

- exploring for crude petroleum and natural gas;
- drilling, completing and equipping wells;
- operating separators, emulsion breakers, desilting equipment and field gathering lines for crude petroleum;
- mining for coal, metal ore, liquids, and non-metallic mineral mining and quarrying; and
- other activities in the preparation of oil and gas up to the point of shipment from the producing property.

Section A: Business Environment

1. 2013 Employment and Unemployment Numbers and Rates
2. Industry's Growth
3. Facts, Trends and Outlook
4. Size of Businesses in Alberta and the Industry

Section B: Human Resources Profile

1. Occupational Information
2. Demographics: Gender and Age
3. Wages

Section C: Additional Information

- Links to Industry Associations

¹ North American Industry Classification System (NAICS) 2007 211, 212, 213

Section A: Business Environment

1. 2013 Employment and Unemployment Numbers and Rates

Table 1

	Alberta	Mining and Oil and Gas Extraction Industry
Number of employed	2,211,000	171,200
Employment Share	N/A	7.7%
Number of unemployed	107,200	6,100
Unemployment rate	4.6%	3.4%

Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics² or Statistics Canada³ websites.

2. Industry's Growth

- The Mining and Oil and Gas Extraction industry accounted for 7.7% of total employment in Alberta in 2013.
- Employment in this industry is expected to grow at an average rate of 0.4% from 2013 to 2017.
- This industry is expected to account for 7.5% of total employment in Alberta in 2015.

For more information, see the *Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2013 – 2017, Industry Employment Outlook*⁴ online and the Alberta Learning Information Service (ALIS)⁵ website for descriptions of industries.

² See <http://work.alberta.ca/labour/labour-force-statistics-and-annual-reviews.html>

³ See <http://www.statcan.gc.ca>

⁴ See <http://work.alberta.ca/documents/cops-alberta-industry-outlook-2013-2017.pdf>

⁵ See <http://www.alis.alberta.ca>

3. Facts, Trends and Outlook

According to Statistics Canada's National Economic Accounts, the Mining and Oil and Gas Extraction industry accounted for 23.3% of Alberta's Gross Domestic Product in 2012, up from 22.7% in 2002. The industry's share of total employment increased from 5.5% in 2002 to 7.7% in 2013.

Employment in 2013 was 1.3% lower than its level in 2012. Over the last 10 years, employment (the total number of employees and self-employed people) increased from 96,500 people in 2003 to 171,200 people in 2013. Data on the number of employees and self-employed people were not available for this industry. However, there were 160,800 employees in the Forestry, Fishing, Mining and Oil and Gas industry in 2013 of whom 98.1% were full-time and 1.9% were part-time. Self employed people accounted for 9.4% of total employment in the Forestry, Fishing, Mining and Oil and Gas industry in 2012.

Table 2

Characteristic	Alberta	Forestry, Fishing, Mining and Oil and Gas Extraction*
Median Retirement Age (years)	62.7	57.3
Average Number of Hours Worked per Week	37.8	45.5
Multiple Jobholders (% of total employment)	5.4%	2.5%
Average Job Tenure (months)	88.1	75.9
Employees Under Union Coverage (%)	19.0%	8.7%
Employees Working Overtime per Week (%)	20.2%	31.3%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0022, 282-0031, 282-0042, 282-0078 and 282-0084, 2014, and custom tabulation (median retirement age)

* Mining and Oil and Gas Extraction is grouped with Forestry, Fishing and Logging with Support Activities for sample size.

Note: The percentage of multiple jobholders in Alberta is obtained by dividing the number of multiple jobholders in Alberta by total employment in Alberta. The percentage of multiple jobholders in the industry is obtained by dividing the number of multiple jobholders in the industry by total employment in the industry. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.

According to *Alberta Occupational Demand Outlook 2013-2023*⁶, employment growth in the following occupations: Supervisors, mining, oil and gas; Underground miners, oil and gas drillers and related workers; Mine service workers and operators in oil and gas drilling; and

⁶ See <http://work.alberta.ca/labour/labour-market-forecasts.html>

Primary production labourers, is expected to exceed Alberta's average rate for all occupations of 2.3%.

4. Size of Businesses in Alberta and the Industry

Table 3

Establishment Size	Businesses in Alberta		Businesses in Forestry, Fishing, Mining and Oil and Gas Extraction*	
	Number of Employees	%**	Number of Employees	%**
Less than 20 employees	654,800	35.5%	32,800	21.3%
20 to 99 employees	648,500	35.1%	46,000	29.9%
100 to 500 employees	352,600	19.1%	34,600	22.5%
Over 500 employees	189,500	10.3%	40,500	26.3%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0076, 2014

*Numbers and percentages refer to Fishing, Mining and Oil and Gas Extraction, and Forestry and Logging with Support Activities. These are grouped together for establishment size.

** Percentages may not add up to 100 due to rounding.

Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the combined industry.

Section B: Human Resources Profile

1. Occupational Information

Some examples of occupations in the Mining and Oil and Gas Extraction industry include:

- mining engineer;
- blaster;
- drilling and service rig manager;
- petroleum engineer; and
- drilling rig leasehand/floorhand.

For a complete listing of all occupations related to this industry as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles⁷ website.

2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown in the Mining and Oil and Gas Extraction industry in 2013 was as follows:

- women employed: 38,800 people, or 22.7%
- men employed: 132,400 people, or 77.3%

Overall in Alberta, women accounted for 45.0 % and men made up 55.0 % of total employment (for all industries).

Table 4

Age Characteristics	Employment in Alberta		Employment in Mining and Oil and Gas Extraction	
	Number	%	Number	%*
15-24 years	317,600	14.4%	16,100	9.3%
25-54 years	1,496,200	67.7%	131,500	75.7%
55 years and over	397,200	17.9%	26,100	15.0%

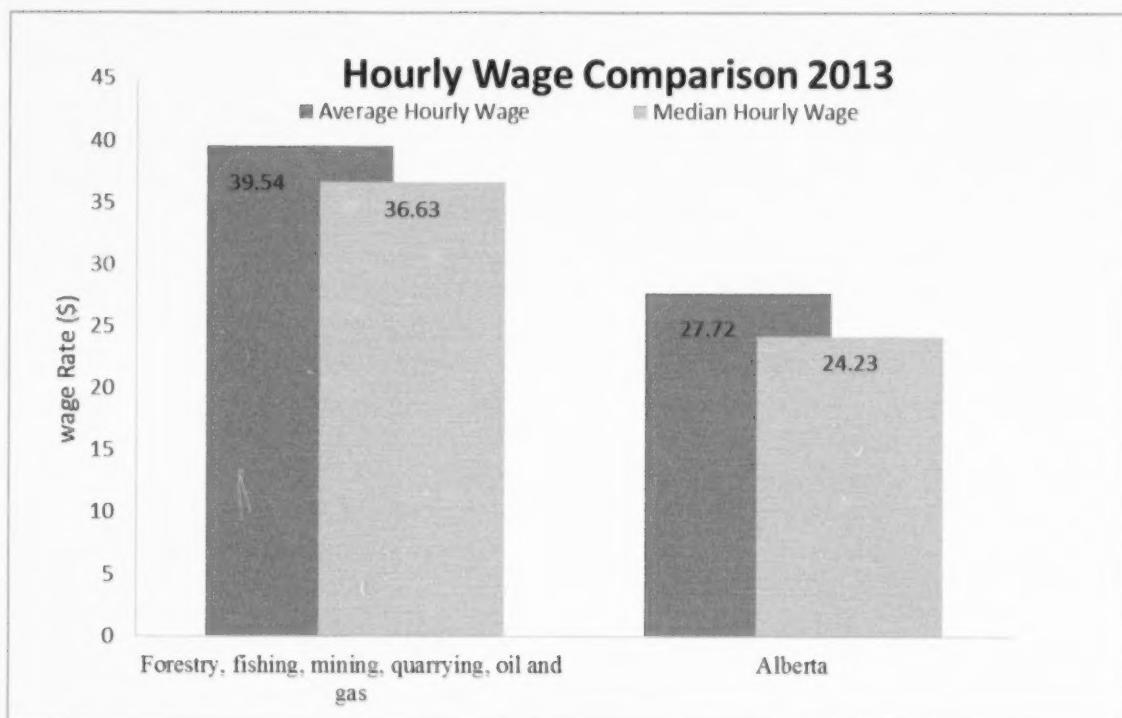
Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2014

* Percentages may not add up to 100 due to rounding

⁷ See <http://www.alis.alberta.ca/occinfo>

3. Wages

Chart 1



Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0072, 2014

Note: Wages pertain to Mining and Oil and Gas Extraction, Fishing, and Forestry and Logging with Support Activities, which are grouped together for sample size reasons.

The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

Wage and Salary Information for Selected Occupations

Table 5

Occupation	Average Hourly Wage			Average Annual Salary
	Starting	Overall	Top	
Petroleum engineer	\$ 43.71	\$ 57.48	\$ 72.59	\$117,880
Petroleum, gas and chemical process operator	\$ 37.85	\$ 42.52	\$ 46.32	\$ 88,755
Truck driver (oil and gas extraction)	\$ 25.63	\$ 30.17	\$ 35.59	\$ 74,330

Data Source: 2013 Alberta Wage and Salary Survey

For more information on the *2013 Alberta Wage and Salary Survey*, refer to the WAGEinfo⁸ webpage. For job descriptions, duties, required skills and education for specific occupations in the Mining and Oil and Gas Extraction industry, visit the ALIS⁹ website.

⁸ See <http://www.alis.alberta.ca/wageinfo>

⁹ See <http://www.alis.alberta.ca>

Section C: Additional Information

Links to Industry Associations

- Canadian Association of Oilwell Drilling Contractors
(<http://www.caodc.ca>)
- Canadian Association of Petroleum Producers
(<http://www.capp.ca>)
- Canadian Institute of Mining, Metallurgy and Petroleum
(<http://www.cim.org>)
- Coal Association of Canada
(<http://www.coal.ca>)
- Petroleum Human Resources Council of Canada
(<http://www.petrohrsc.ca>)
- Petroleum Services Association of Canada
(<http://www.psac.ca>)
- Petroleum Technology Alliance Canada
(<http://www.ptac.org>)

Call us or visit our website for more information or to find the following publications:

- 2013 Annual Alberta Labour Market Review
- Monthly Alberta Labour Force Statistics Highlights and Packages
- Alberta's Occupational Demand and Supply Outlook
- Alberta Labour Force Profiles
- Alberta Industry Profiles

www.work.alberta.ca/labour.html (see Labour Market Information)

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